Item ID: Revision ID: Item Name:	D3209-041 Bracket Assem	ably		Accept	*N90	<u> </u>)* s	Setup Start Stop	14.71
Start Date: Required Date: Reference:	5/15/13	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Iter Custome				14(1)
Approvals:		n: <u>M(5</u>	Date: /3-05-/5			Date:	F	Run Star Stop	"INK I"
Sequence ID/ Work Center I	D	Operation Description		Run Hours		Tool # Plan Code	Accept Qty	Reject Qty	Reject Insp. Number Stamp
Draw Nbr	Rev	ision Nbr	-	··					
D3209	Rev	Α							<u> </u>
100				0.00					
100 Bandsaw Jeaspa Bandsaw		Memo Cut blanks:	1.500" x 1.250" x 1.950" lo	0.00 ong Bar (+0.030/-0.000	nH	12/05/21	10	ø	
110				0.00					
110 HAAS I HAAS CNC vertice	al machine #1	HAAS CNC VERTICAL Memo Machine D	MACHINING #1	0.00		2013-06-01	ĺβ	ψ	
TIANS CITE VOID	a macinio # 1	Deburr and	•						
· ms		- Debuil allu	Tumble						
-120		QC2- Inspect parts off m	nachine FAI/FAIB	0.00					
120 QC Quality Control		Memo		0.00	Ofe	2013Uo ⁻ 01	10	Ø	· · · · · · · · · · · · · · · · · · ·

NCR:	⁄es	/ No				WORK ORDER NON-	CO	NFORM	/ANCE / UPDATE				
											QA Closed:	Date	
Work Orde	er:					DISPOSITION			AGAIN	ST DE	PARTMENT	/PROCESS	
Part I	- . No.				·	Rework Scrap Use-as-is Work Order Update		f Therm	Skid-tube Crosstu Machining Small F noforming Finish Large Fab Compos	ab ng	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	1	Initial	Action		Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved												·	
						F	AUI	LT CATE	GORY				
Landi	ng (1			_	General	_	7			7		7
		Bending Centre No Cracks Crushed/ Cuffs Heat Trea	Crimped it n Strip in		o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Instruct Mainte Mislabe Misread	on Incomplete ions Incomplete/Unclear nance iled		Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct sissing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
1	1	Ripples in	Bend		j	Drill Holes	1	Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

May-13-13 1:10:21 PM

Required Date: 5/31/13

T 4	ID	
Item	ID:	

D3209-041

Accept

N900040100

Setup Start

NQ1

Revision ID:

Start Date:

Item Name:

Bracket Assembly

5/15/13 **Start Oty:** 10.00

Rea'd Oty: 10.00

10

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: _____

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

ND1*

NP2

Sequence ID/ Work Center ID

130

Operation Description

Set Up/ Run Hours

Tool ID

Tool # Plan Code

Accept Otv Reject Reject Oty Number

Stop

Insp. Stamp

130

QC

Memo

OC8- Inspect parts - second check

0.00

0.00

D.=

13/06/02

10 d

Numb

0A5 08 08

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

140
HandFinish

Hand Finishing

Finish Memo

0.00

D NB1363

150

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

150

Powder Coating

Memo

30

0.00

Note: Cover the hote for D3209-1 before powder coat.START

IME: ____

_OVEN TEMPERATURE:

32,31

J~~

m13/3/2

10 X / m/ 13/06/03

										DQA:	Date:	*
NCR: Y	es / No)		•	WORK ORDER NON-C	100	NFORM	MANCE / UPDA	TE	•		
										QA Closed:	Date:	
Work Orde	àr.				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
WOIR Olde					Rework	}		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo.				Scrap	1	1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is	1		noforming	Finishing		e/Packaging	Other
NCR N	lo.				Work Order Update	1		~	Composite	•	Supplier	1
												-
Root				Descri	iption of work order update		Initial	Action	ı	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	nief Eng	Descript	ion	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other			1									
Process	\vdash											
Supplier												
Training												·
Unapproved		1	<u> </u>	<u> </u>		<u> </u>	LT CATE	COPY				
Landi	ng Gear				General	AUI	LICAIL	GONT				- ***
Carrar	Bendin	g			Bend	Г	Grain			Ovalized		Pressure/Forced
		Not Conce	entric to	o/s	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure
	Cracks			-,- -	Broken/Damaged	-	4	ion Incomplete		Part Incorred	 	Weld
	⊢	d/Crimped	I	 	Burrs	\vdash	- 1 `	ions Incomplete/Unc	lear	Part Lost/Mi		Wrong Stock Pulled
	Cuffs	•			Contamination		Mainte			Part Moved	· _	
	Heat T	reat			Countersink		Mislabe	eled		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Mav-13-13 1:10:21 PM

Way-13-13 1.1	0.21 F W		, interior of the					
Item ID: Revision ID: Item Name:	D3209-041 Bracket Asse	embly		Accept	*N900040	1100*	Setup Start	ועיטו
Start Date: Required Date	5/15/13	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Item ID: Customer:			
Reference:	•						Run Star	
Approvals:		lan:	Date:	Tooling: SPC (Y/N):	Date: Date:		Run Star Stop	NRI
Sequence ID/ Work Center		Operation Description		Set Up/ Run Hours	Tool ID Tool #	Plan Acc Code Qty	cept Reject y Qty	Reject Insp. Number Stamp
*160 *160* QC Quality Control		QC3- Inspect Part Finish Memo		0.00		10	φ	13-6-3. 656
161 *161* Small Fab Small Fab		Memo press fit bus	hing as per dwg	0.00		/0	∅⋉	J3/06
170 *170* QC Quality Control		QC5- Inspect part compl	eteness to step on W/O	0.00 0.00 13. ()	S	<u>I</u> C)	

NCR: Y	'es	/ No				WORK ORDER NON-C	O	VFORM	MANCE / UPI	DATE			
									***		QA Closed:	Date	e:
Work Orde	ır.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Work Orde						Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	_					Use-as-is		Thern	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	۱o. <u>-</u>	· · · · · · · · · · · · · · · · · · ·				Work Order Update]		Large Fab	Composite	J	Supplier	
Root				<u> </u>	Descri	ption of work order update		nitial	Act	tion	Sign &		
Cause		Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling							Ì						
Operator													
Material													
Setup .					1								
Other	Ш												
Process													
Supplier	Ц		•		i								
Training	Ш												
Unapproved				·									
							AUL	T CATE	GORY				····
Landi	_	ı				General		1		_	7	F	\neg
	${oldsymbol{ o}}$	Bending				Bend		Grain			Ovalized	-	Pressure/Forced
	Н	Centre No	ot Conce	ntric to	o/s	BOM/Route	<u></u>	Hardwa		<u> </u>	Over/Under	 	Temperature/Cure
	-	Cracks			<u> </u>	Broken/Damaged		1	ion Incomplete	_	Part Incorred		Weld
	-	Crushed/	Crimped			Burrs	Ŀ	1	ions incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Ш	Cuffs				Contamination	<u></u>	Mainte		L	Part Moved		
	Ш	Heat Trea	it		<u> </u>	Countersink		Mislabe			Positioned V		_
	\vdash	Inspectio	•	Tube	L	Cut Too Short		Misread	d		Power Loss/	Surge	Other
		Ripples in	Bend			Drill Holes		Offset					
		Torque W	laves in f	Extrusio	n _	Drawing		Out of	Calibration				

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 4

Mav-13-13 1:10:21 PM Item ID: D3209-041 **Revision ID:** Item Name: 5/15/13 **Start Date:** Required Date: 5/31/13

Bracket Assembly

10 **Start Otv:** 10.00 Rea'd Otv: 10.00

Cust Item ID: Customer:

Reference:

Approvals:

Process Plan:

OC:

Date:

Date:

Tooling:

Accept

SPC (Y/N):

Date:

Date:

Tool #

Plan

Code

N900040100

Run

Reject

Oty

Stop

Setup Start

Number Stamp

Insp.

Reject

180

120 Packaging

Packaging

Sequence ID/

Work Center ID

Memo

Operation

Description

0.00

Set Up/

Run Hours

0.00

Tool ID

Accept

Qty

190

QC21- Final Inspection - Work Order Release

Identify as per dwg & Stock Location: 6A

0.00

190

oc

Memo

0.00

MLJ 13-06-28

Ouality Control

NCR: Y	es / No				WORK ORDER NON-C	CON	FORM	MANCE / UPI	DATE			
					€.					QA Closed:	Date:	•
Work Orde	r:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
					Rework]		Skid-tube	Crosstube		Water Jet	Engineering
Part N	0				Scrap	1 1		Machining	Small Fab	4	d. Eng. Coor.	Quality
NCR N	lo				Use-as-is Work Order Update]		noforming Large Fab	Finishing Composite	Kec/Stoi	re/Packaging Supplier	Other
Root				Descri	ption of work order update	In	nitial	Act	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chi	ef Eng	Desc	ription .	Date	Verification	QC Inspector
Doc/Data										-		
Equip/Tooling		}				İ			:			
Operator												
Material	_					l			•			
Setup		1				1						
Other						1						
Process					,							
Supplier						ł						·
Training						1						
Unapproved						<u> </u>						L
						AULT	CATE	GORY				
Landir	ng Gear			_	General				r	7	_	1
-	Bending				Bend	$\boldsymbol{\vdash}$	Grain			Ovalized		Pressure/Forced
		ot Conce	ntric to	o/s	BOM/Route		Hardwa		ļ	Over/Under		Temperature/Cure
	Cracks			<u></u>	Broken/Damaged	├	-	ion Incomplete	_	Part Incorre		Weld
ļ	—	/Crimped		<u> </u>	Burrs	-		tions Incomplete/	Unclear	Part Lost/M		Wrong Stock Pulled
	Cuffs		. ,	<u> </u>	Contamination			enance	<u> </u>	Part Moved		
	Heat Tre			<u> </u>	Countersink	-	Mislabe		_	Positioned V		1 ₋ .
		on Strip in	Tube	<u> </u>	Cut Too Short	1	Misrea	d		Power Loss/	Surge	Other
	Ripples i			<u> </u>	Drill Holes	\vdash	Offset					
		Vaves in		n	Drawing	\vdash		Calibration				
	Turning :	Sequence	<u>;</u>	1	Finish		Out of 9	Sequence				

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

Page 1

Work Order ID:

101628

Parent Item:

D3209-041

Parent Item Name:

Bracket-Assembly

Start Date: 5/15/13

Required Date: 5/31/13

Start Qty: 10.00

Required Qty: 10.00

(Co	m	ments:	
-				
(`^	m	nonent	

IPP A04 06 09New issueK I/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last ** Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3209-3 Bushing		Manufactured	No			100	Each	17.0000	1	105	<u>S</u> .	3/06	177
				Location ST034		<u>Loc Otv</u> 17 17	<u>Lo</u>	c Code		7	310	263	5" (3
M6061T6B1.500X01.250 6061-T6 Bar-1.50 x 1.25		Purchased	No	8002	, o	170	f	29.2997	0.175	1.842105	·	100	
,	·			Location MAT003	649	<u>Loc Qty</u> 29.2996859 0.2056859	<u>Lo</u>	c Code					
	1				443 —	29.094			1-	7.06	MA	13/0	25/27

		€ ♥	Ñ
DQA:	Date:		
-			

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

NCN. 10	.3 / 110						VII (102 / 01 B		QA Closed:	Date	:
Work Order	:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No					Rework Scrap] [Skid-tube Machining	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR No	D				Use-as-is Work Order Update	Thern	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root				Descri	ption of work order update	Initial	Actio	on	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Chief Eng	Descri	ption	Date	Verification	QC Inspector
Doc/Data											
quip/Tooling	-										.
Operator Material	-										
etup	-										
Other	-									ì	
Process		l									
Supplier	-										
raining	†	·									
Jnapproved											·
		•		1	F.	AULT CATE	GORY		•		
Landin	g Gear				General						
[-	Bending				Bend	Grain			Ovalized		Pressure/Forced
	Centre No	ot Concei	ntric to	o/s	BOM/Route	Hardwa	are		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Inspect	ion Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped			Burrs	Instruc	tions Incomplete/U	nclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination	Mainte	enance		Part Moved		
L	Heat Trea	it			Countersink	Mislabe	eled		Positioned V	Vrong	<u> </u>
	Inspection		Tube	_	Cut Too Short	Misrea	d		Power Loss/	Surge	Other
	Ripples in				Drill Holes	Offset	,				
L	Torque W			n L	Drawing	\vdash	Calibration				
	Turning S	equence			Finish	Out of	Sequence				
	Mayo/Tu	rict in Tub	ho	1	Folio	I Outside	Dimensions				

DART AEROSPACE LTD	Work Order:	101628
Description: Bracket	Part Number:	D3209-1
Inspection Dwg: D3209 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing	Tolerance Accept Reie		Reject	Method of	Comments		
Dimension	Tolerance	Dimension	Ассері	Reject	Inspection	Comments	
0.675	+/-0.005	0.676	/		Hb	31006	
1.850	+/-0.010	1.850			. 11	и	
R0.40	+/-0.030	R 0,400			Rad G	OFE	
0.725	+/-0.005	0729			Culipar	OFC-01	
0.800	+/-0.010	0,800	/			٠ , , ,	
1.125	+/-0.010	1.130			U	4	
Ø0.375	+0.001/-0.000	0.3755			٠,	٠,١	
0.180	+/-0.010	0.175			('	11	
R0.13	+/-0.030	RO.125			Radb	JKC.	
0.180	+/-0.010	0.183	/		Cil.	5fc-01	
0.854	+/-0.010	0.848			٠,	٠	
		-					
						1	
				-		·	
						0	

Measured by: 5fc

Date: 2013 06-01

Audited by: 13.0 08

Prototype Approval: N/A

Date: 13/06/02 9-89

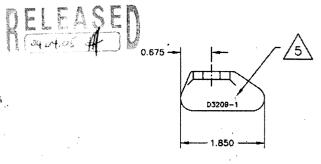
Date: N/A

Rev	Date	Change		Revised þy∧	Approved
Α	05.02.17	New Issue	(P/O D3209-041)	KJ/JLM 🚓	

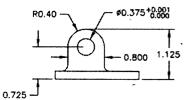


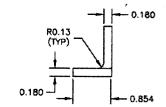


DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED	APPROVED CHICAGO	D3209	REV. A SHEET 1 OF 1	
DATE	9	TITLE	SCALE	
04.01.27	ખે ત્રુષ્	BRACKET	1:2	
A	04.01.27	NEW ISSUE		



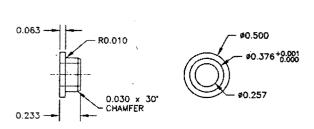


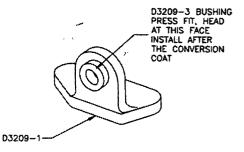






D3209-1 BRACKET







D3209-3 BUSHING SCALE 1:2



- D3209-1 BRACKET: D3209-3 BUSHING
 1) BREAK ALL SHARP EDGES 0.005 TO 0.015
 2) MATERIAL: 6061-T6 (QQ-A-200/8 OR QQ-A-250/11 OR QQ-A-225/8) ALUMINUM BAR (M606176B)

 3) MATERIAL: AISI 303 SS (M303R)

 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3

 5) ENGRAVE DART P/N AS SHOWN
 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 7) ALL DIMENSIONS ARE INCHES

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